6934

WIRE DRAG

6934

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic Wire Drag

Field No. 101 *Office No.* H-6934

LOCALITY

State ~~Alaska~~

General locality Aleutian Islands
Kiska Island

Locality Kiska Harbor ~~and S. Pass~~

194 3

CHIEF OF PARTY

W. M. Scaife — HYDROGRAPHER

G. 6. Mattison — EXPLORER

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DATE

8-1870-1 (1)

6819

Form 537
Ed. Dec. 1930

REG. NO.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 101

REGISTER NO. H-6934

State ~~Alaska~~

General locality Aleutian Islands

Locality Kiska Island
Kiska Harbor ~~and South Pass~~

Scale 1:10,000 Date of survey Aug. & Sept., 1943

Vessel HYDROGRAPHER EXPLORER

Chief of Party W. M. Scaife G. C. Mattison

Surveyed by ~~Officers of the HYDROGRAPHER;~~ A. L. Wardwell S. B. Grenell

Protracted by R. M. Sylar

Soundings penciled by R. M. Sylar

Soundings in ~~fathoms~~ feet feet

Plane of reference MLLW

Subdivision of wire dragged areas by R. M. Sylar

Inked by

Verified by J. A. Mc Cormick

Instructions dated HYDROGRAPHER under instructions from U.S.N. EXPLORER under instructions from Liaison Officer, Adak. 19

Remarks: Smooth Sheet and Plotting by the Seattle Processing Office.

U. S. GOVERNMENT PRINTING OFFICE

Field Notes for Wire Drag Survey

H 6934 W.D.

KISKA HARBOR and SOUTH PASS

U.S.C. & G.S.S. EXPLORER September, 1943

- - - -

The central area of Kiska Harbor was wire dragged by the Ship HYDROGRAPHER, W. M. Scaife, Commanding, during the late summer of 1943. In September the EXPLORER took over the project and completed the wire drag of the harbor and also dragged the restricted portion of South Pass.

METHOD:

The standard wire drag was used with 3/16 inch wire and regulation buoys, weights and toggles. Tests were made with the painted iron rod in accordance with instructions. The drag was towed by two survey launches from the EXPLORER and a motor whaleboat was used as a drag tender.

HARBOR AREA:

On the west and south side of the harbor the area covered by the HYDROGRAPHER was extended further inshore to shoal water or to areas in which permanent mooring buoys were planted. All splits left by the HYDROGRAPHER were covered.

The signals NOR and MAST near the center of the harbor are the masts of a sunken Japanese freighter projecting about 15 feet above the surface. A small area around these masts was of necessity left uncovered.

In latitude 51° ~~50'30~~ 57.90 longitude 177° 32'.67 there is a small marker buoy planted by the Navy to mark a shoal or obstruction. Because of the buoy it was impossible to cover the area, but the small area around the buoy was carefully covered by drifting with the hand lead in the bight of the drag, and a least depth of 19 feet (boat sheet depth) was secured. The bottom seemed to be broken, pinnacle rock formation. Other groundings were handled by the usual procedure and adequate notes can be found in the records.

Shoal was struck with effective depth of 17 ft. on Sept. 3 by Hydrographer's party and cleared same day with effective depth of 12 ft. Navy planted marker buoy on Sept. 5.

SOUTH PASS:

The area dragged in South Pass was done under very unfavorable tide and weather conditions. Several storms occurred while this work was underway and a moderate to heavy swell was running most of the time. Also there is considerable tidal current through the pass and the periods of near slack water last not more than a half hour. There are three shoals forming a triangle near the narrowest part of the pass. The old survey H-2700 (1904) showed depths ~~of 20, 21, and 28 feet respectively on these shoals.~~ of 24, 25 and 21 feet where the 1943 hydrography (H-6933) shows 11, 15 and 15 feet respectively.

N.B.

In dragging these shoals spots, the drag, on several occasions, slowed up and formed a partial "V", then cleared. This was obviously cutting kelp, because kelp came to the surface and was found on the gear when the drag was picked up. For this reason, I do not feel certain as to the depths cleared by the drag as we were dragging fair with the current and in such cases the drag will ride up over the kelp which is towed under. The hydrographic launch saw kelp at slack water on all three shoals. Whenever the drag grounded, soundings were taken in the bight by the tender, and each area was carefully covered later by the hydrographic launch both with fathometer and hand lead.

The most southwesterly of the three shoal spots has the least depth. The hydrographic sheet shows a sounding of 11 feet - fathometer - in an area covered by 15 feet by the drag, but the 11 foot sounding should be retained- although it may be on kelp,-because it is possible that the drag rode the kelp over the shoal.

There are extensive notes in the drag records for these areas. A narrow and clear passage along the west edge of the channel was cleared at around 24 feet (Pos. 39 D to 44 D and 45 D to 50 D). Two small marker buoys were planted in the narrowest part to mark this channel. These buoys were to be later replaced by the Navy with standard nun and can buoys. This channel is good for a depth of at least 25 feet.

S. B. Grenell
Lieut. Comdr., U.S.C.& G.S.

Seattle Processing Office Notes

H-6934

Datum-

The datum is the same as Pratt 1904 after applying to latitude the correction of -24".09 as shown on G.P. #57376. Since making the smooth sheet, the new charts 9124 and 9155 have been issued. These use the datum of G.P. #57376 without the latitude correction, or Dall's latitude of 1870 and Pratt's longitude of 1904. The chart datum is indicated on the smooth sheet. Chart datum to remain as is until triangulation is extended from the east [Memo of Chief of Nautical Charts Branch. Memo attached to D.R. for H-6933 (1943)].

N.B. 7-14-

Control-

The control is based on the 1904 triangulation. Extensions were made in 1943 by the party on the HYDROGRAPHER, W. M. Scaife, Commanding. The computations of pratt 1904 and Scaife 1943 are on Dall's latitude of 1870 and Pratt's longitude of 1904. Pratt's latitude correction of -24".09 was applied to all triangulation stations plotted.

Photostats of Scaife's Lists of Directions were obtained and cuts on the signals plotted. There are many cuts in the sounding records of sheet H-6933 which were plotted. The intersections were very good. The plotting was checked.

As the cuts on Signal DOC were slim, this point was computed from the available information, computations attached to the report for H-6934.

DOC or DOCK

Latitude	51° 56' 07".18	221.9	(1632.6) Met.
Longitude	177 36 26.67	509.6	(638.8) Met.

APE - BIG - LAM-

In plotting cuts for the location of signals on the smooth sheet, it was found that signal APE had been confused with BIG, and BIG had been confused with LAM. It is also apparent from changes made in the record by the sounding party that signals LAM and BIG were confused in the position fixes. These discrepancies have been corrected and explained by notes in the record. ✓

Splits-

There are several small splits. One at the N.W. corner of the dragged area was caused by grounding of the drag without later sweeping with a shoaler drag depth. Lat. 51°58.6', Long. 177°32.9' Grounding at 23 ft.

Two small splits were caused by buoys. They are at:

Latitude	51°.57?34	Longitude	177° 54:37	Buoys not inked as they are moved about so much
	51 58.03		177 32.51	

Other buoys in dragged areas apparently were placed after the HYDROGRAPHER had dragged the area, or were removed before the EXPLORER's party swept the place. ✓

A centrally located wreck causes the largest split. The masts protruded and are located by triangulation. ✓

The other splits are small gaps in the work or insufficient overlap of the drag. ✓

Positions 18 to 20 "B" day, EXPLORER- Lat. 51°57.2', Long. 177°34.2'

This strip was not plotted on the boat sheet. The record was rejected, apparently because it duplicated a similar strip and was unnecessary. However, it was plotted on the cover sheet, and the grounding at Position 20B, at a slightly different position from the grounding at 17B, was pricked through to the smooth sheet. The drag strip 18B to 20B is not shown on the smooth sheet. Both groundings were at 41 ft. A 41 ft. sounding on H-6933 (1943) appears to be the logical answer. Its position differs slightly from both of the approximate positions obtained by the drag party.

Plotting "D" day positions 1 to 5.-

This strip was not plotted on the boat sheet, apparently because of confusion of signals and an error in angle. The strip has been plotted on the smooth sheet in a manner that appears entirely satisfactory, but has not been inked on the sheet. It adds nothing to the area depth sheet, except for a microscopic change from 41 feet to 44 feet. Not inked.

H-6934

List of Signals

Triangulation Stations

CHUTE	1904	
DOK	1943	(4th order) - Computations attached to report
ED	1943	
FOX	1943	
GUM	1943	
HOW	1943	
IDA	1943	
JIG	1943	
KAY	1943	
LEDGE	1904	
LOT	1943	
MAST	1943	
MIKE	1943	
NIX	1943	
NOR	1943	
NORTH HEAD	1904	
PIN	1943	
QUIZ	1943	
RIDGE	1943	
ROCK	1904	
RUST	1943	
TAR	1943	
ISLE	1904	SOUTH HEAD FLAG 1943

Hydrographic Signals

ABE	HUP	WAC
AD	JOKE	WAX
BAR	LAM	XIT
BERTH	MAN	YET
BIG	NIP	ZED
BIRD	OLD	
BOW	OBOE	
BUM	PILE	
CAN	POLE	
CROSS	REX	
COVE	SIG	
DUZ	SPUR	
DAN	STERN	
DOG	STACK	
DOT	SUN	
EX	UTE	
GOON	VERA	
GUS	VIM	

Explanatory Notes-

The field records have been freely supplemented with office notes to explain puzzling matters which have been answered by diligent searching and careful consideration. Notes have been used on the face of the smooth sheet to explain groundings, etc.

Statistics-

	HYDROGRAPHER	EXPLORER	TOTAL
Number of Positions	297	165	462
Stat. Mi. of Drag Strip	31.2	15.2	46.4
Area - Square Stat. Miles			2.6

- - - - 0 - - - -

Edgar E. Smith
Assoc. Cartographic Engineer
Seattle Processing Office

Approved and Forwarded:

F. H. Hardy
Officer in Charge,
Seattle Processing Office.

Kiska Hbr & South Pass
Computations to locate
Signal Rock or Doc

Data assembled from

(1) List of Directions South Head - 1943
(2) List of GPs - Scaife 1943
(3) Sextant angles at ⊙ Tar and ⊙ Quiz recorded in sounding records.

Computed in Seattle Processing Office

891
135

South Head - N. Head - Quiz

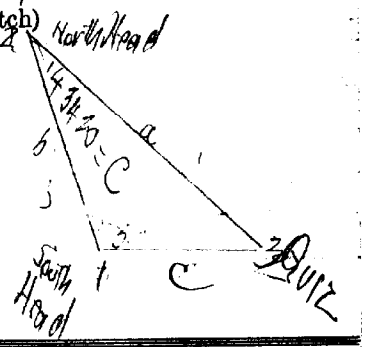
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
Form 665
Ed. Dec. 1929

TRIANGLE COMPUTATION USING TWO SIDES AND INCLUDED ANGLE

$\left[\frac{a}{b} = \tan(45° + \phi)\right.$ (Call longer side a); $\tan \tfrac{1}{2}(A_p - B_p) = \tan \phi \tan \tfrac{1}{2}(A_p + B_p)$: $\left. c = \frac{a \sin C_p}{\sin A_p}\right]$*

C_s	14° 34' 20"	Log a	3.606 383	Log m	1.403 29
Sph. excess / 3		Log b	3 510 392	Log sin C_s	9.400 70
C_p		Log tan $(45+\phi)$	8.095 991	Log a	3.606 38
$\frac{1}{2} C_p$	7° 17' 10"	$(45°+\phi)$	51° 16' 51.7	Log b	351039
$90° - \frac{1}{2}C_p = \frac{1}{2}(A_p + B_p) =$	82° 42' 50"	ϕ	6° 16' 51.7	Log sph. ex	7.92076
$\frac{1}{2}(A_p - B_p)$	40 43 25.1	Log tan ϕ	9.041 6526	Sph. excess	
Sum $= A_p$	123° 26' 15.1	Log tan $\frac{1}{2}(A_p + B_p)$	10.893 2769		
Diff $= B_p$	41° 59' 24.9	Log tan $\frac{1}{2}(A_p - B_p)$	9.934 9295	40 43	
C_p					

(Sketch)



Log a	3.606 383
Log sin C_p	9 400 711
Colog sin A_p	0.078 580
Log c	3.085 674

CHECK COMPUTATION

No.	STATION	SPHERICAL ANGLE	SPHERICAL EXCESS	PLANE ANGLE AND DISTANCE	LOGARITHM
	2-3				3.606 383
	1			123 26 15.1	0.078 580
	2			14 34 20	9.400 711
	3			41 59 24.9	9.825 429
	1-3			12:18.1	3.085 674
	1-2				3.510 392
	2-3				
	1				
	2				
	3				
	1-3				
	1-2				

*The subscripts s and p on this form refer to spherical and plane angles respectively.

U. S. GOVERNMENT PRINTING OFFICE 11—11142

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U.S. COAST AND GEODETIC SURVEY
Form 665
Ed. Dec. 1929

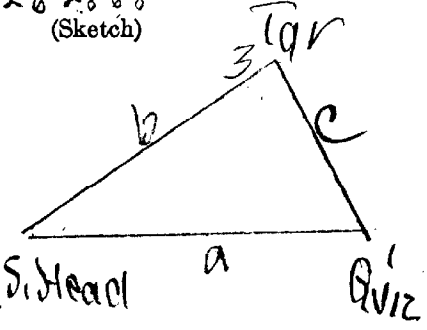
South Head - Tar - Quiz

TRIANGLE COMPUTATION USING TWO SIDES AND INCLUDED ANGLE

$\left[\frac{a}{b} = \tan(45° + \phi)\right.$ (Call longer side a): $\tan \frac{1}{2}(A_p - B_p) = \tan \phi \tan \frac{1}{2}(A_p + B_p)$: $\left. c = \frac{a \sin C_p}{\sin A_p}\right]^*$

C_s	° ′ ″	Log a	3.085 674	Log m	
$\frac{\text{Sph. excess}}{3}$		Log b	3.034 015	Log sin C_s	
C_p	35 56 10	Log tan $(45+\phi)$	0.051 659	Log a	
$\frac{1}{2} C_p$	17 58 05	$(45°+\phi)$	48 23 58.7	Log b	
$90° - \frac{1}{2}C_p = \frac{1}{2}(A_p + B_p)$	72 01 55	ϕ	3 23 58.7	Log sph. ex.	
$\frac{1}{2}(A_p - B_p)$	10 22 48.4	Log tan ϕ	8.773820	Sph. excess	
Sum $= A_p$	82 24 43.4	Log tan $\frac{1}{2}(A_p + B_p)$	10.489048		
Diff $= B_p$	61 39 06.6	Log tan $\frac{1}{2}(A_p - B_p)$	9.262868		
C_p			(Sketch)		

Log a	3085 674
Log sin C_p	9.768 551
Colog sin A_p	0.003 820
Log c	2.858 045



7211.8 ~ 7211.8 ~ 7211.8 ~ 7211.8 ~ 7211.8 ~

CHECK COMPUTATION

No.	STATION	SPHERICAL ANGLE	SPHERICAL EXCESS	PLANE ANGLE AND DISTANCE	LOGARITHM
	2-3				3.034 015
	1 Quiz	61 39 06.6			0.055 478
	2 S. Head	35 56 10			9.768 551
	3 Tar	82 24 43.4			9.996 180
	1-3	7		7211.8	3.858 044
	1-2			1218.07	3.085 673
		180 00 00			
	2-3				
	1				
	2				
	3				
	1-3				
	1-2				

*The subscripts s and p on this form refer to spherical and plane angles respectively.

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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 25
Ed. Jan., 1929

11—9121

6933
6934

COMPUTATION OF TRIANGLES

State: _____

	NO.	STATION	OBSERVED ANGLE	CORR'N	SPHER'L ANGLE	SPHER'L EXCESS	PLANE ANGLE AND DISTANCE	LOGARITHM
		2-3						3.034 015
		1 Doe	(16 59 47)					0.534 254
		2 S. Head	123 34 30					9.920 730
		3 Tar	39 25 42					9.802 853
		1-3					3082.4	3 488 899
		1-2					2349.8	3 371 022
			180 00 00					
		2-3						3.085 673
		1 Doe	(27 57 46)					0.328 920
		2 S. Head	87 38 20					9.999 631
		3 Quiz	64 23 53					9.955 119
		1-3					2595.5	3.414 224
		1-2					2342.7	3.369 712
			180 00 00					
		2-3						2.858 044
		1 Doe	(10 58 00)					0.720 703
		2 Tar	42 59 00					9.833 648
		3 Quiz	126 03 00					9.907 682
		1-3					2584.6	3.412 395
		1-2					3065.0	3.486 429
			180 00 00					
		2-3						
		1						
		2						
		3						
		1-3						
		1-2						

Do not write in this margin

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 27
Ed. April, 1929

POSITION COMPUTATION, THIRD-ORDER TRIANGULATION

			°	′	″
α	2 S. Head	to 3 Tar	228	52	24
2d ∠		&	+ 35	56	10
α	2	to 1 Quiz	264	48	34
Δα			+		50
			180	00	00.0
α′	1 Quiz	to 2 S. Head	84	49	24
		FIRST ANGLE OF TRIANGLE	61	38	06.6

			°	′	″
α	3 Tar	to 2 S. Head	48	52	58
3d ∠		&	− 82	24	43.74
α	3	to 1	226	28	14.6
Δα			+		16.4
			180	00	00.0
α′	1	to 3	14.6	28	31.0

φ	51	57	22.32	2 S. Head	λ	− 177	36	10.56	φ	51	57	45.87	3 Tar	λ	− 177	36	53.22
Δφ	+		3.56		Δλ	+		3.51	Δφ	−		19.45		Δλ′			20.86
φ′	51	57	25.88	1 Quiz	λ′	− 177	37	14.08	φ′	51	57	25.88	1 Quiz	λ′	− 177	37	14.08

	Logarithms	Values in seconds
s	3.085 673	
Cos α	8.956 497 n	
B	8.509 936	
h	0.552 106	
s²	6.171 3	
Sin² α	9.996 4	
C	1.5097	
	7677 4	
h²	1.104	
D	1.380	
1st term		− 3.5654
2d term		+ 0048
3d term		+
−Δφ		− 3.5606

½(φ+φ′)	51 57 24.11		
	Logarithms	Values in seconds	
s	3.085 673		
Sin α	9.998 215 n		
A′	8.508 813		
Sec φ′	0.210 243 +		
Δλ	1.802 924 n	63.525	
Sin ½(φ+φ′)	9.896 275		
½Δα	1.699 219 n	50.02	

	Logarithms	Values in seconds
s	2.858 044	
Cos α	9.930 959	
B	8.509 935	
h	1.298 938	
s²	5.716 0	
Sin² α	9.4844	
C	1.5100	
	6.7114	
h²		
D	2.380	
1st term		+ 19.4508
2d term		+ .0005
3d term		+
−Δφ		19.4513

½(φ+φ′)	51 57 36		
	Logarithms	Values in seconds	
s	2.858 044		
Sin α	9.742 234 n		
A′	8.508 813		
Sec φ′	0.210 243		
Δλ	1.310 324 n	20.460	
Sin ½(φ+φ′)	9.896 295		
½Δα	1.215 619 n	16.43	

11—9362 U. S. GOVERNMENT PRINTING OFFICE, 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 27
Ed. April, 1929

POSITION COMPUTATION, THIRD-ORDER TRIANGULATION

				°	′	″
α	2 S. Head	to 3	Quiz	264	48	34
2d ∠		&		+ 87	38	20
α	2 S Head	to 1	Doe	352	26	54
Δα						
				180	00	00.0
α′	1 Doe	to 2	S. Head	27	34	47

FIRST ANGLE OF TRIANGLE

				°	′	″
α	3 Quiz	to 2	S. Head	84	49	24
3d ∠		&		− 64	23	53
α	3 4	to 1	Doe	20	25	31
Δα						
				180	00	00.0
α′	1 Doe	to 3	Quiz			

φ	51	57	29.37	2 S. Head	λ	177	36	10.56	3 Quiz	λ	177	37	14.08
Δφ	−	1	15.14		Δλ		+	16.11		Δλ		+	47.41
φ′	51	56	07.18	1 Doe	λ′	177	36	26.67	1 Doe	λ′	177	36	26.67

	Logarithms	Values in seconds
s	3.369 712	221.9 (1632.6)
Cos α	9.996 217	
B	8.509 036	
h	1.875 865	1st term 75.139
s²	8.2373	
Sin² α	6.7394	
C	1.5100	
	6.4867	2d term + .003
h²		
D		
		3d term +
		−Δφ 75.14

	Logarithms	Values in seconds
½(φ+φ′)	51 56 44.7	
s	3.369 712	509.6 (636.8)
Sin α	9.118 662	
A′	8.508 814	
Sec φ′	0.210 031	
Δλ	1.207 219	−16.115
Sin ½(φ+φ′)	9.896 211	
−Δα	1.103 430	10079

	Logarithms	Values in seconds
s	3.414 224	
Cos α	9.971 799	
B	8.509 936	
h	1.895 959	1st term 78.697
s²	9.0856	
Sin² α	6.8284	
C	1.5100	
	7.4240	2d term + .003
h²		
D		
		3d term +
		−Δφ 78.70

	Logarithms	Values in seconds
½(φ+φ′)	51 56 46.6	
s	3.414 224	
Sin α	9.542 807	
A′	8.508 814	
Sec φ′	0.210 031	
Δλ	1.675 876	+47.41
Sin ½(φ+φ′)	9.896 212	
−Δα	1.572 088	

11—9362 U. S. GOVERNMENT PRINTING OFFICE, 1929

TIDAL NOTE

Aleutian Islands

Kiska Harbor and South Pass

Massacre Bay Tide Gage

Latitude	52° 51'	
Longitude	173 12	
Staff reading of MLLW		3.7 feet

The tidal readings of the above gage were corrected to Kiska readings by applying a time correction of minus 1 hr. 20 min., range factor 1.0. See Director's letter 36-mlh, of January 14, 1944.

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. H6934

Records accompanying survey:

Boat sheets ....; sounding vols. ....; wire drag vols. ....;

bomb vols. .....; graphic recorder rolls .....;

special reports, etc. .....

.....

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet		462
Number of positions checked		47
Number of positions revised		7
Number of soundings recorded		.....
Number of soundings revised (refers to depth only)		.....
Number of soundings erroneously spaced		.....
Number of signals erroneously plotted or transferred		.....
Topographic details	Time	.....
Junctions	Time	.....
Verification of soundings from graphic record	Time	.....

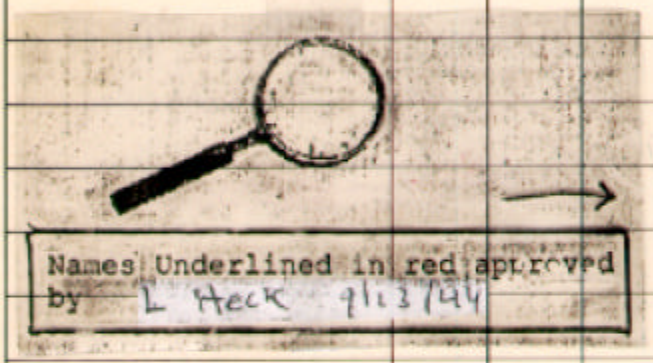
Verification by J.A. McCormick Total time 44 hr. Date 8/29/44

Review by J.A. McCormick Time 6 hr. Date 9/7/44.

GEOGRAPHIC NAMES

Survey No. H6934

Name on Survey	A	On Chart No. B	On previous survey No. C	On U. S. quadrangle Maps D	From local information E	On local Maps F	P. O. Guide or Map G	Rand McNally Atlas H	U. S. Light List K	
Aleutian Islands		(title)								1
Kiska I.		515	770	E		(U.S.G.S.)				2
Kiska Harbor		515	775	E		"				3
Little Kiska I.		"				"				4
North Pass		"				"				5
South Pass		"				"				6
South Head		"				"				7
										8
										9
										10
										11
		→			L Heck 9/23/44					12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27



Names Underlined in red approved by L Heck 9/13/44

M 234

LAE

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. June 1937

TIDE NOTE FOR HYDROGRAPHIC SHEET

August 3, 1944

~~Division of Hydrography and Topography:~~

✓ Division of Charts: Attention: H. R. EDMONSTON

Plane of reference approved in
3 volumes of sounding records for

HYDROGRAPHIC SHEET 6934

Locality Aleutian Islands: Kiska Harbor and South Pass

Chief of Party: W. M. Scaife in 1943
Plane of reference is mean lower low water reading
1.0 ft. on tide staff at Kiska Harbor (Sweeper Cove - 1^h20^m
5.3 ft. below B. M. 1 (USN) (Range factor 1.0)

Height of mean high water above plane of reference is 3.4 feet.

Condition of records satisfactory except as noted below:

E T Green
Chief, Division of Tides and Currents.

U. S. GOVERNMENT PRINTING OFFICE 154827

DIVISION OF CHARTS

REVIEW SECTION - SURVEYS BRANCH

REVIEW OF HYDROGRAPHIC SURVEY — REGISTRY NO. 6934 W. D.

Field No. 101

Aleutian Islands; Kiska Island; Kiska Harbor
Surveyed in August - September, 1943; Scale 1:10,000
Project C. S. 218

Wire Drag — Dual Control

Chief of Party - W. M. Scaife; G. C. Mattison
Surveyed by - A. L. Wardwell; S. B. Grenell
Protracted by - R. M. Sylar
Subdivision of wire dragged areas by - R. M. Sylar
Inked by - R. M. Sylar
Verified by - J. A. McCormick
Reviewed by - J. A. McCormick
Inspected by - H. R. Edmonston, September 7, 1944

1. Comparison with Hydrographic Surveys

H-2700 (1904) and H-6933 (1943)

Hydrographic work on H-6033 is limited to two developments in Kiska Harbor and one in South Pass. H-2704 covers the entire dragged area and is a fairly well developed survey. Both H-2700 and H-6933 show depths of 5 to 5½ fm. in Lat. 51°58.6', Long. 177°32.9' where the drag grounded with an effective depth of 23 feet. Actual sounding obtained by the drag party was 30 feet, so it seems probable that the grounding was on a sharp artificial obstruction or that its authenticity is questionable. It was not cleared.

A 17 foot drag grounding (actual sounding 19 feet, rocky) in Lat. 51°57.9', Long. 177°32.7' compares with a shoal depth of 25 feet, rocky, on H-2700. Surrounding depths on the old survey are 6 to 8 fm. The shoal was cleared with an effective depth of 12 feet.

The drag party had considerable difficulty in South Pass. A sounding of 11 feet in Lat. 51°57.1', Long. 177°36.6' on H-6933 (24 feet on H-2700) apparently was cleared with an effective depth of 15 feet. Similarly a sounding of 15 feet 200 meters to the east (21 feet on H-2700) appears to be cleared with 19 feet. Possibility of the soundings being to kelp rather than to bottom was brought out in the Processing Office report on H-6933 but Mr. Grenell advises their retention on grounds that the drag may have lifted in passing over smooth kelp.

It will be noted that several soundings have been added to the present survey from H-6933 in order to justify drag groundings. At most groundings the drag parties were unable to get soundings as shoal as the effective depths.

2. Comparison with Chart 9124 (Print of May 12, 1944)

Limits of dragged areas have been added to the chart from the Explorer's B. P. 37692. Some revision is necessary particularly as regards splits, only 2 now being charted of the 9 shown on the survey.

The sunken wreck, "Rep 1943" in Lat. 51°58.5', Long. 177°33.0' on the chart is from Restricted N. to M. 1 of 1944. Its position is cleared by 44 to 46 feet on the survey and H-2700 (1904) shows depths of about 16 fm. The Hydrographic Office was queried concerning authority for its charting, but the only information available was that it was a Japanese ship, exact date of sinking unreported but presumably prior to the date of the survey. Under the circumstances, the way in which it is now charted is probably best.

The datum of the survey is not the same as that used on the chart. Reasons for not changing the chart datum are discussed in detail in the Descriptive Report and review for H-6933 (1943).

3. General Comment

The field party did a good job of dragging a difficult area and the processing was excellent. The extremely complicated A & D sheet required only minor revisions.

4. Compliance with Project Instructions

Satisfactory.

5. Additional Field Work Recommended

More drag work probably will be done in this area and at that time some additional investigation might be made of the following items:

a. The 23 foot grounding (uncleared) in Lat. 51°58.6 Long. 177°32.9' (par. 1).

b. The sunken wreck reported in Lat. 51° 58.5', Long. 177°33.0' (chart datum). There is a possibility that the position is erroneous and that this is the same obstacle noted in item (a). Already cleared by 44-46 ft by SOH

not same wreck see bp 38783 Rut.

c. The 11 and 15 foot depths in South Pass.

d. The several small splits.

Examined and approved:

Robert W. Knapp
Chief, Surveys Branch

T. S. Gordon
Chief, Division of Charts

Carl O. Hunton
Chief, Section of Hydrography

G. R. Rude
Chief, Division of Coastal Surveys

Wire Drag Sheet

H 6934

From Mosquito Bay Tide

KISKA HBR - Time Diff - 1 hr 20 Min

Aug 29 to Sept 5 43

Hydrographers WD

Range from

Factor 1.0

Tides

29

15.05

12.46

13.20

14.38

Aug 30

Aug 22

Sept 1

Sept 2

Sept 5

Sept 3

NOTE:
Text and numbers with leader lines have been added where the original scanned image is illegible

7 8 9 10 11 12 13 14 15 16 17 18

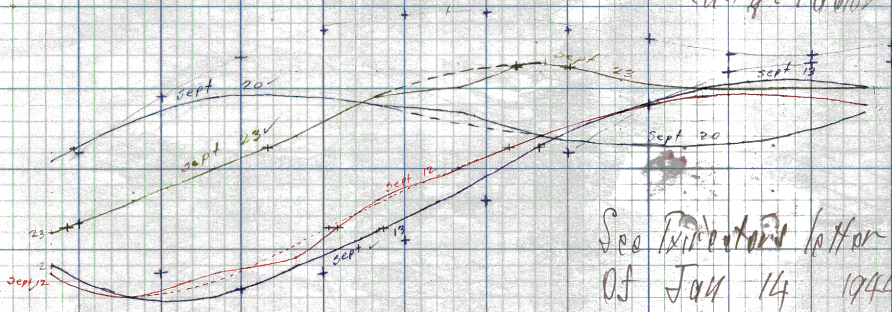
246354

ALASKA AIR - Wire Drag

Sept 12-13-20-23 43

Explorer WD

By comparison with Massacre Bay tides. Time diff -1hr 20 Min
Range Factor 1.0



See Explanatory letter 36 rolls
Of Jan 14 1944

5 4 3 2 1 0 -1

7 8 9 10 11 12 13 14 15 16 17 18 19 20

applied to chts 9150 / 9180 } F.M.A. Sept. 1944

Applied to Chart 8864 thru Chart 9124 Jan. 1945. HEM.

appears to have been applied to Cht. 9124 by FMA
(see History 9124) RR 8/51

Applied to Cht 9124 Reconst. thru current chart 9124
11/18/54 CRW

applied to chart 9180 Reconst thru chart 9124 & recent 7-19-55 CRW.

" " " 8864, WE 11/16/61